



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

NOV 07 1991

SUBJECT: Approval of a Funding Request for a Removal Action at the Eastern Maryland Wood Treating Site, Federalsburg, Dorchester County, Maryland

FROM: Edwin B. Erickson
Regional Administrator (3RA00)

TO: Donald R. Clay, Assistant Administrator
Office of Solid Waste and Emergency Response (OS-100)

THRU: Henry L. Longest, II, Director
Office of Emergency and Remedial Response (OS-200)

ATTN: Stephen D. Luftig, Director
Emergency Response Division (OS-210)

ISSUE

The attached CERCLA Funding Request pertains to the Eastern Maryland Wood Treating Site in Dorchester County, outside of Federalsburg, Maryland. The Eastern Maryland Wood Treating Company, which operated at the site from late 1983 until early 1991, used copper chromate arsenate (CCA) and creosote to treat wood supplied by customers. In October 1991, the owners declared bankruptcy, and the site is now in the hands of a trustee. An assessment of the site performed in accordance with the National Contingency Plan (NCP) by my staff and State of Maryland officials has identified a threat to human health and the environment due to the presence of tanks of wood treating sludges and creosote-contaminated waters, drums of creosote-contaminated soils, and arsenic-contaminated groundwater.

Because conditions at the Eastern Maryland Wood Treating Site meet removal criteria set forth in the NCP, Section 300.415, and pursuant to Delegation of Authority 14-1-A giving the Regional Administrator authority to approval CERCLA Removal Actions with a total cost of less than \$2 million and completion within 12 months, Region III has approved the use of CERCLA funds in the amount of \$1,813,585, of which approximately \$1,385,461 are for extramural contractor costs, to mitigate the threat to public health and the environment.

Attachment: Initial Funding Request

AR200001



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SUBJECT: Funding Request for a Removal Action at the Eastern Maryland Wood Treating Site, Federalsburg, Dorchester County, Maryland

FROM: Edward M. Powell, On-Scene Coordinator
Eastern Response Section (3HW31)

TO: Edwin B. Erickson
Regional Administrator (3RA00)

THRU: Abraham Ferdas, Associate Director
Office of Superfund (3HW02)

I. ISSUE

A Removal assessment performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, by the On-Scene Coordinator (OSC) and officials of the State of Maryland has identified a threat to human health, welfare, and the environment due to the presence of uncontrolled hazardous substances at the Eastern Maryland Wood Treating Site in Federalsburg, Dorchester County, Maryland. The OSC has determined that the site meets the criteria for initiating a Removal Action under Section 300.415 of the NCP. Funds are needed immediately to mitigate the threats to public health and the environment posed by this site.

II. BACKGROUND

A. Site Description

The Eastern Maryland Wood Treating Site is located on the Delmarva Peninsula, on 25 acres, in a rural area of northern Dorchester County, Maryland, approximately 1.5 miles southwest of Federalsburg, Maryland. The Eastern Maryland Wood Treating Company, Inc., operated on the site, using copper chromate arsenate (CCA) and creosote to treat wood supplied by customers.

The site is in a flat, low-lying area with sandy soils. The land north of the facility is used for farming, while the area to the east, south, and west is forested with pines. The water table, which fluctuates seasonally, is approximately seven feet below the ground surface. The southern boundary of the site is adjacent to a marshland ecosystem. A small, unnamed stream that flows to the south lies approximately 2,000 feet east of the facility. This stream empties into Marshy Hope Creek, which drains into Nanticoke River, a tributary of the Chesapeake Bay.

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Drainage ditches along the northeast, east and southeast boundaries of the site flow toward the unnamed stream. Treating operations occurred on the northern portion of the site, in an area artificially elevated with fill material. Four main structures are found here: a boiler building, a combination office/wood treating building with three treatment retorts, housing for the kiln (used to dry wood prior to treatment), and a storage area for wood chips to fuel the kiln. The facility also has two cooling sheds consisting of covered concrete drip pads with sump pits at the base. When the facility was in operation, the remainder of the site was used to stack treated wood until it could be removed; several stacks of treated wood remain on the site. Ten monitoring wells are scattered around the perimeter of the site; and two wells, reportedly installed by the company as a source of water for fire fighting, are next to the kiln building. A chain link fence with locked gate restricts access to the site.

Potable water wells within a three-mile radius of the site serve an estimated 6500 people. These wells include the Federalsburg municipal wells, which serve a population of approximately 4500, and private, domestic wells, which serve a population of approximately 2,000. Ten domestic wells lie within a half-mile radius of the site; the nearest domestic well is located about 1,100 feet north, along Clark Canning House Road. There is also a potable water well on the site itself.

B. Site History

The Eastern Maryland Wood Treating Company operated at the site from late 1983 until early 1991. On October 17, 1991, the owners filed for chapter 7 bankruptcy. The site is currently under the supervision of a court-appointed trustee.

The Maryland Department of the Environment has documented that the company hid drums of treatment sludges prior to a RCRA inspection. State officials have received reports that wastes were buried beneath concrete pads located on the site. In addition, the State has received numerous complaints from neighbors about the site.

In 1986, approximately 1,000 gallons of creosote were spilled onto the ground and into an open drainage ditch north of the wood treating building during unloading from a tanker truck. This drainage ditch flows into the unnamed stream east of the site. According to a Site Investigation Report prepared by the State of Maryland for the U.S. EPA, no effort was made by the company to halt the flow of creosote or to remove the spilled creosote. The proper notifications were not made to State or Federal authorities.

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The State of Maryland learned of the spill during an inspection in September 1987. Inspectors observed 18 55-gallon drums of contaminated soil, debris, and cylinder sludge around the site then called the Maryland State Police and requested a search warrant. The State Police subsequently investigated the handling of hazardous waste at the facility, including searching the property for buried drums of material. In October 1987, 10 full 55-gallon drums of creosote waste sludge and 1 ton of creosote-contaminated soil were exhumed and disposed of offsite.

Under orders from the State of Maryland, the company dredged the drainage ditch, removing 200 55-gallon drums of soil, which were sent offsite for disposal. The company also dredged the drainage ditch a second time to clean up more of the creosote contamination, then stored the soil and water generated onsite.

C. Types of Substances Present

Materials believed to be remaining on the site include approximately 10,000 gallons of creosote, three tanks holding unknown quantities of CCA sludge, process cylinders containing CCA and creosote sludges, approximately 42,000 gallons of water contaminated with CCA and/or creosote, 30 to 40 cubic yards of creosote-contaminated soil, and several drums containing either creosote-contaminated soil or water. These materials fall into hazardous waste categories F034 and F035 under the Resource Conservation and Recovery Act (RCRA) and are considered to be hazardous substances pursuant to Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Arsenic, a component of CCA, has been found in the monitoring wells and the fire protection wells onsite at levels ranging from less than 10 parts per billion (ppb) to 28.9 ppb. The Removal Action Level for arsenic is 2 ppb. In the text of the Site Investigation Report, the State of Maryland reports obtaining analytical results of up to 133,000 ppb arsenic in soils. The State also reports obtaining soil levels of chromium (another component of CCA) up to 350,000 ppb; up to 144,000 ppb of copper were found in soils as well. Arsenic, chromium, and copper are each hazardous substances pursuant to CERCLA.

Evidence of creosote contamination has also been found in the groundwater onsite. The polycyclic aromatic hydrocarbons benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene have been found in several of the monitoring wells at levels slightly above their respective Maximum Contaminant Levels. Naphthalene, another polycyclic aromatic hydrocarbon, has been found in one of the fire protection wells at 935 ppb, well above the Removal Action Level of 140 ppb. These polycyclic aromatic hydrocarbons also are hazardous substances pursuant to CERCLA.

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D. NPL Site Status

A Preliminary Assessment and Site Investigation (PA/SI) have been performed for the Eastern Maryland Wood Treating Site. The site was subsequently scored for placement on the National Priorities List (NPL), but it did not rank sufficiently high. However, due to the potential for an imminent threat onsite, the EPA Region III Site Assessment Section and the Remedial Branch referred the site to the Removal Branch for further consideration.

E. State and Local Authorities' Roles

Interest in the Eastern Maryland Treating Site by agencies and officials of the State of Maryland is high at all levels, in part due to the complaints about the site by neighbors. The governor conducted a site flyover at one point, and Representative Gilchrest has recently held site-related meetings with the EPA Region III Regional Administrator.

State agencies initiated monitoring at the site when facility commenced operations in 1983. In 1987 and 1988, the State investigated wastes buried onsite, the creosote spill, and the extent of contamination. State agencies subsequently prepared the Preliminary Assessment and Site Investigation reports for the U.S. EPA. A State official accompanied the OSC on his site assessment and provided background information. The State has exhausted all means of obtaining site clean-up by the Potentially Responsible Party, and has requested EPA assistance. The OSC is coordinating all site-related activities with State authorities.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Section 300.415 of the NCP lists the factors to be considered in determining the appropriateness of a Removal Action. Paragraphs (b)(2)(i), (ii), (iii), (iv), and (vii) of Section 300.415 directly apply as follows to the conditions at the Eastern Maryland Wood Treating Site:

- A. 300.415(b)(2)(i) "Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants."

Even though human access to the site is restricted, the site still poses a threat. The area in which the site is located is home to a variety of game animals; deer and quail have been observed on the site, where they may come in direct contact with contaminated surface soils and water and thus pose a potential threat to human populations through the food chain.

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The site also poses a potential threat to nearby human populations via direct contact, inhalation, and ingestion of contaminated dusts, surface water, and groundwater that may migrate offsite.

- B. 300.415(b)(2)(ii) "Actual or potential contamination of drinking water supplies or sensitive ecosystems."

Elevated levels of arsenic and naphthalene have been found in the groundwater onsite. Increased contamination, possibly extending to nearby residential wells, may be expected if the source of the contamination onsite is not removed.

The State of Maryland considers marshland ecosystems to be environmentally sensitive. One such area lies on the southern boundary of the site. The southern portion of the site is lower than the northern half, where treatment activities occurred, so that the marshland may be subject to contaminated runoff from a portion of the site.

- C. 300.415(b)(2)(iii) "Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release."

Thousands of gallons of contaminated water are stored in tanks on the site. The tanks, which are unprotected from weathering, are rusty and may be expected to deteriorate to the point of release if current conditions continue. One of the water storage tanks is open at the top and receives runoff from the roof of the creosote process building; there is the potential for this tank to overflow during prolonged periods of rainfall.

Tanks and process units inside the buildings onsite contain creosote and CCA sludges and waters. Since the owner has declared chapter 7 bankruptcy, all site activities, including maintenance, have ceased. Without proper routine maintenance, the buildings may be expected to deteriorate, permitting water to infiltrate and possibly spread contamination further.

- D. 300.415(b)(2)(iv) "High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate."

The State of Maryland has found elevated levels of arsenic in the soils on the site, primarily around the drip pads. Creosote and CCA are also expected to be present in soils on the southern part of the site, where treated wood was stacked on the ground prior to being taken by customers.

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- E. 300.415(b)(2)(vii) "The availability of other appropriate Federal or State response mechanisms to respond to the release."

The State of Maryland does not have the resources at this time to undertake a clean-up action of the magnitude required at this site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or to the environment.

V. PROPOSED ACTION AND COSTS

A. Proposed Action

The actions proposed for the Eastern Maryland Wood Treating Site are designed to eliminate the imminent threat posed to human health and welfare, and to the environment by the site. The proposed action consists of the following activities:

- o Repair perimeter fence to further restrict site access,
- o Conduct sampling to determine the extent of contamination and quantity of hazardous substances and contaminated soil to be removed,
- o Address treated wood remaining onsite, and other debris which may impede this action,
- o Pump hazardous substances from storage tanks and stage for disposal,
- o Remove creosote and CCA sludges from tanks, retorts, and process lines inside the buildings. Stabilize lines, retorts, and tanks. Stage hazardous substances for disposal,
- o Excavate contaminated surface soil and stage for disposal. Backfill with clean soil,
- o Sample, analyze, and transport wastes staged for disposal.

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B. Estimated Costs

<u>Extramural Costs</u>	<u>Proposed Ceiling</u>
Regional Allowance Costs	
ERCS	\$1,154,551
20% Contingency	230,910
Other Costs Not Funded From the Regional Allowance	
TAT	55,730
Subtotal, Extramural Costs	1,441,191
20% Contingency	288,238
TOTAL, EXTRAMURAL COSTS	\$1,729,429
<u>Intramural Costs</u>	
Direct Costs	37,716
Indirect Costs	46,440
TOTAL INTRAMURAL COSTS	\$ 84,156
ESTIMATED TOTAL PROJECT CEILING	\$1,813,585

C. Contribution to Remedial Performance

The Eastern Maryland Wood Treating Site is not currently on the National Priorities List, so there are no long-term Remedial Actions planned for the site. The proposed Removal Action is consistent with accepted removal practices and is expected to abate the threats that meet the NCP removal criteria. The proposed activities are not anticipated to impede any future responses.

D. Compliance With ARARs

The proposed Removal Action set forth in this memorandum will comply with all applicable and relevant and appropriate environmental and health requirements, to the extent practicable, considering the exigencies of the situation.

**VI. EXPECTED CHANGE IN THE SITUATION
SHOULD NO ACTION BE TAKEN OR ACTION BE DELAYED**

If no action is taken or if the action is delayed, conditions at the site are expected to deteriorate, resulting in the spread of additional contamination at the site. Neighbors of the site have expressed concerns for several years now about site-related contamination. It is possible that their concerns will continue if the source of the contamination is not removed.

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VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues pertaining to the Eastern Maryland Wood Treating Site.

VIII. ENFORCEMENT

The U.S. EPA Region III Superfund Enforcement Section has been provided with all background information available to pursue any and all Enforcement Actions pertaining to the Eastern Maryland Wood Treating Site (see attached Confidential Enforcement Memorandum).

IX. RECOMMENDATION

Because conditions at the Eastern Maryland Wood Treating Site meet the NCP Section 300.415 criteria for a Removal Action, I recommend your approval of this request for \$1,813,585, of which approximately \$1,385,461 are Regional Allowance Costs. You may indicate your approval or disapproval by signing below. I recommend your approval to initiate response actions due to the nature of the threat described herein.

Approved: Date: 11/6/91

Disapproved: _____

Date: _____

Attachment: Confidential Enforcement Memorandum

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